

B.Sc.(Econ) Examination by course unit
International Finance - ECN209 (MOCK EXAM)

Date: XXX XXX 2008, XX.XX p.m.

Duration: 2 hours

You are not permitted to start reading this question paper until instructed to do so by an invigilator.

Complete all rough workings in the answer book(s) and cross through any work that is not to be assessed.

Calculators are permitted in this examination provided they are not programmable. Please state the name and type of calculator on your answer book.

Answer one question from Section A and two questions from Section B.
--

Examiner: Dr. Giulio Fella

Section A

- (40 points) Consider the perfect-foresight version of Dornbusch model described by the following equations

$$\begin{aligned} \text{IS:} & & y_t &= \bar{z} + (e_t + p^* - p_t), \\ \text{LM:} & & m_t - p_t &= \bar{y} - i^* - \Delta e_{t+1}, \\ \text{Period } t=1 \text{ AS:} & & p_t &= \bar{p}, \\ \text{Period } t > 1 \text{ AS:} & & y_t &= \bar{y}. \end{aligned}$$

All variables are in logs, with $m_t, y_t, e_t, p_t, p^*, i^*$ denoting respectively the current nominal money supply, output, the nominal exchange rate, the home price level, its foreign counterpart and the foreign nominal interest rate. The variable \bar{z} captures exogenous changes to aggregate, desired expenditure, while $\Delta e_{t+1} = e_{t+1} - e_t$ denotes the expected change in the nominal exchange rate. The home price level is fixed at \bar{p} in period 1, while it is fully flexible and output is at its full employment level \bar{y} from period 2 onwards. The nominal exchange rate is flexible. Assume for simplicity, that the variables $p^*, i^*, \bar{p}, \bar{y}$ all equal zero.

- Assume \bar{z} and m_t equal zero and are expected to stay constant. Determine the equilibrium values of y_t, p_t, e_t at any time from $t = 1$ (included) onwards.
 - Suppose that at time $t = 1$, the foreign price level increases permanently to $p^* = 1$. Determine the equilibrium values of y_t, p_t, e_t at any time from $t = 1$ (included) onwards. Does e_t overshoot its long-run value? Explain.
 - Suppose that $p^* = 0$, as in (a), but that at time $t = 1$ the foreign interest rate increases permanently to $i^* = 1$. Determine the equilibrium values of y_t, p_t, e_t at any time from $t = 1$ (included) onwards. Does e_t overshoot its long-run value? Explain.
- (40 points) Consider the modern version of the monetary model described by the following equations

$$\begin{aligned} \text{LM: } m_t - p_t &= \bar{y} - 0.5(i^* + \Delta e_{t+1}), \\ \text{PPP: } e_t &= p_t - p^*. \end{aligned}$$

For simplicity, assume i^*, \bar{y}, p^*, m_t all equal zero.

- Suppose that at time $t = 1$, the government sets the rate of money growth to 0.2 and agents expect the policy to be permanent. Derive the equilibrium values of e_t and p_t for all $t \geq 1$.
- Suppose that at time $t = 1$ the government announces that it will irrevocably peg the exchange rate at $\bar{e} = 2$ from time $t = 2$ onwards and that it will set the money supply from $t = 2$ onwards so as to maintain the peg. The public fully believes the announcement and the government does indeed implement it. Derive the equilibrium values of e_t and p_t from $t = 1$ onwards and of the nominal money supply from time $t = 2$ onwards.

Section B

3. (30 points) Discuss Balassa-Samuelson as a theory of the real exchange rate.
4. (30 points) Discuss the modern version of the monetary approach to the exchange rate and its ability to account for fluctuations in the nominal exchange rate. What are its predictions about the relationship between increases in the nominal interest rates and changes in the nominal exchange rate?
5. (30 points) Derive the conditions under which a country runs a current account deficit, according to the intertemporal approach to the current account. Under which conditions does a country gain from being able to borrow and lend internationally?
6. (30 points) Discuss the relative effectiveness of fiscal and monetary policy in a small open economy. Please spell out the relevant assumptions.

End of examination